# LODI CITY COUNCIL

**Carnegie Forum**

**305 West Pine Street, Lodi**

## AGENDA – SPECIAL MEETING

**Date: November 22, 2005**

**Time: 7:00 a.m.**

For information regarding this agenda please contact:

**Susan J. Blackston**
**City Clerk**
**Telephone: (209) 333-6702**

*NOTE: All staff reports or other written documentation relating to each item of business referred to on the agenda are on file in the Office of the City Clerk and are available for public inspection. If requested, the agenda shall be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. To make a request for disability-related modification or accommodation contact the City Clerk's Office as soon as possible and at least 24 hours prior to the meeting date.*

**A. Roll call**

**B. Regular Calendar**

B-1 Review proposed wastewater capacity fee, provide direction, and set public hearing for January 4, 2006, to consider adoption of the fee (PW)

**C. Adjournment**

Pursuant to Section 54956.2(a) of the Government Code of the State of California, this agenda was posted at a place freely accessible to the public 24 hours in advance of the scheduled meeting.

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Susan J. Blackston
City Clerk

***NOTICE: Pursuant to Government Code §54954.3(a), public comments may be directed to the legislative body concerning any item contained on the agenda for this meeting before* (in the case of a Closed Session item) *or during consideration of the item.***

AGENDA ITEM B-01

# CITY OF LODI
# COUNCIL COMMUNICATION

**AGENDA TITLE:** **Review Proposed Wastewater Capacity Fee, Provide Direction, and Set Public Hearing for January 4, 2006, to Consider Adoption of the Fee**

**MEETING DATE:** **November 22, 2005 (Special Meeting)**

**PREPARED BY:** **Public Works Director**

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**RECOMMENDED ACTION**: That the City Council review the proposed Wastewater Capacity Fee, provide direction, and set a public hearing for January 4, 2006, to consider adoption of the fee.

**BACKGROUND INFORMATION**: The proposed amendments to the Municipal Code implement changes to the method wastewater capacity impact fees will be charged to new growth for capacity at the White Slough Water Pollution Control Facility (WSWPCF) and facilities at the Municipal Service Center (MSC). This is a one-time fee on new development or improvements that increase loading on WSWPCF. The actual fee will be adopted by Resolution.

The existing wastewater capacity fee was approved by Council following the expansion of WSWPCF in 1991, as the final step in a series of rate and capacity (connection) fee increases initiated in 1986. The present capacity fee is $2,099 per sanitary sewer unit (SSU), which is the same as was adopted in 1991. A SSU represents the equivalent demand of a two-bedroom home.

Recently, the plant has undergone two additional capital construction projects, and a third is planned that increased and/or will increase the rated capacity to 8.5 million gallons per day while upgrading the level of treatment to tertiary as required by the plant's Discharge Requirements issued by the Central Valley Regional Water Quality Control Board.

A report, *City of Lodi Wastewater Capacity Fees: Revised Analysis*, prepared for the City by Hilton, Farnkopf & Hobson, LLC, is attached for reference as Exhibit 1. The report presents the results of analysis that assigns the value of past and future capital construction costs to existing and future development in the City. The recommendation is to raise the capacity fee to $5,115 per SSU. The recommended fee does not include 2% for Art in Public Places.

Capital construction and debt service costs have, in each case, been allocated to new growth and existing customers. In the case of the 1991 improvements (which refinanced the 1989 improvements), 74% is allocated to serve new growth. For the 2003 (Phase I) and 2004 (Phase II) expansions, 26% and 24.2%, respectively, are allocated to new growth. The 2006 (Phase III) expansion is currently in design, and 58.4% is allocated to new growth. The costs attributed to existing Lodi customers are the share attributed to increasing the plant's rated flow capacity using updated State parameters and upgrading the level of treatment provided in response to more stringent State discharge requirements. The capital and debt service costs of facilities serving existing customers are provided by user rates.

As part of this analysis, the City's separate wastewater impact fee, which primarily covers costs for expansion of the MSC, has been rolled into the capacity fee. This was done to simplify the fee system to only have one sewer development fee. The ordinance changes being proposed implement this change. The actual fee, as per the existing City Code, will be set by Resolution.

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APPROVED: _____
Blair King, City Manager

Another change in the capacity fee being proposed is that the fee would be adjusted annually on July 1, based on the Engineering News Record 20 Cities Average, as is now done for the other impact fees in January.

As shown in Table 4 of the report, the recommended capacity fee also includes a separate fee, "high-strength connections", which is broken down into flow, BOD, and suspended solids components. With the addition of tertiary treatment this year, the relative weight among these components has shifted with a higher increase for flow than for the other constituents. This relationship is also reflected in treatment costs, and adjustments for the high-strength users service charges are also being recommended:

| | Current | Proposed |
|---|---|---|
| Flow (per MG, annual basis) | $1,170.45 | $2,052.00 |
| BOD (per 1,000 lbs., annual basis) | $572.79 | $338.64 |
| SS (per 1,000 lbs., annual basis) | $468.23 | $211.73 |

Finally, the staff recommendation on the capacity does not include a component for the Public Art Program. This recommendation is based on the fact that a significant portion of the proposed fee is for past improvements made at White Slough. These improvement projects were not designated to include public art nor did they contribute to the Public Art Fund. Should the Council wish to include the full Public Art component, the fee should be increased by 2%, from $5,115 to $5,217. Another option would be to only include the art component in future projects. Based on the fee components shown in Table 1 of the attached report, and considering the 2006 project, Master Plan and MSC projects, the proportion is half, therefore, a 1% Public Art fee would be appropriate ($5,115 to $5,166). The appropriate amount will be included in the program as directed by the Council.

Pending Council direction, staff would bring the ordinance changes to the Council in December for introduction and adoption in January along with the public hearing (the hearing is required to set the fee, not to change the ordinance.

At the conclusion of the public hearing, Council will be requested to adopt the ordinance revising the Municipal Code and adopt the resolution setting the wastewater capacity impact fee.

**FISCAL IMPACT**: The additional utility revenue from the capacity fee will be significant, but the actual amount will obviously depend on development levels. Revenue in FY 04/05 was $1.44 million. The change in the service charges for high-strength users, based on current usage, will reduce annual revenue by approximately $200,000.

**FUNDING AVAILABLE**: Not applicable.

Richard C. Prima, Jr.
Public Works Director

Prepared by F. Wally Sandelin, City Engineer
RCP/FWS/pmf
Attachment
cc: Interested Parties

Exhibit 1

HILTON FARNKOPF & HOBSON, LLC
Advisory Services to
Municipal Management

2175 North California Boulevard, Suite 990
Walnut Creek, California 94596
Tel: (925) 977-6950
Fax: (925) 977-6955
*hfh-consultants.com*

Walnut Creek
Newport Beach

August 15, 2005

Mr. Richard C. Prima
Director of Public Works
City of Lodi
221 West Pine Street
Lodi, CA 96241-1910

Subject: **Wastewater Capacity fees: Revised Analysis**

Dear Mr. Prima:

The purpose of this letter is to present the results of our analysis of the City's wastewater capacity fees.

**Current Capacity Fees**

The City has two sewer development fees that are charged to new connections. The fees are based on either sanitary sewer units (SSUs)[1] or acreage. The fee based on sanitary sewer units is called the "capacity fee" and is intended to recover the cost of treatment and disposal facilities. The current capacity fee is $2,099 per SSU.

The fee based on acreage is called the "development impact mitigation fee" (DIMF) and is intended to recover the cost of other facilities that are not directly related to treatment or disposal but are still integral with the sewer system, such as the Sewer Fund's share of the corporation yard. The DIMF varies depending on land use, ranging from $583 per acre for low-density residential development to $2,035 per acre for high-density

[1] Sanitary sewer units are based on a system of equivalencies specified in Article III., Section 13.12.180 of the Lodi Municipal Code. For residential connections, one SSU equals a two-bedroom residence. A one-bedroom residence equals 0.75 SSUs and each additional bedroom equals 0.25 SSUs. For non-residential SSUs, 30 different parameters are used to establish the number of SSUs, such as the number of seats for restaurants, the number of machines for laundries, the number of students for schools, the number of employees for grocery stores, etc.. For high-strength connections, estimates of flow, BOD, and SS are used.

residential development with other intervening rates for non-residential development. For a typical home with a density of five units per acre, the DIMF is $116.60.

### Capacity Fee Methodology

Capacity fees represent the unit cost of capacity paid by new connections to ensure that they contribute their fair share of capital costs. In calculating capacity fees, it is important to correlate the facilities with the corresponding connections to establish the "nexus" or relationship required by the Mitigation Fee Act.[2] The unit cost is the ratio of the value of the facilities divided by the corresponding connections. Of the commonly recognized methods for calculating capacity fees, we used the incremental approach, which calculates the unit cost of the growth-related portion of system expansion.

Unlike the City's current capacity fee and DIMF, we do not distinguish between wastewater treatment/disposal facilities and other support facilities like corporation yards, which do not provide capacity *per se*. The City is not unique in differentiating between connection-based and acreage-based components of capacity fees. We are aware of other water and sewer agencies with a similar bifurcation. Although it is possible to distinguish between the two types of facilities, we see no compelling logic to denominate certain facilities by capacity and others by acreage. Hence, we combined all facilities into a single capacity fee that is denominated by connections. This approach is simpler, which may explain why it is more prevalent.

## INCREMENTAL COST CALCULATION

Under the incremental cost approach, the cost of expansion attributable to growth is divided by the growth-related capacity to determine the unit cost of growth. **Table 1** shows the costs associated with upgrades for existing users and with expansion for new users. The majority of these costs are the debt service on the three outstanding bonds that have been issued and one bond planned for 2006.

The debt service cost includes principal and interest as part of the value of the facilities. Interest is often mistakenly excluded in capacity fee calculations under the misapprehension that double counting will not occur. In other words, it is thought that new connections will pay the interest in both the capacity fee and later through sewer

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[2] Government Code 66000 *et seq.*.

service charges. That reasoning is flawed. New connections will only pay interest on debt service that is not included in the capacity fee. If all of the interest is included in the capacity fee, there should be no need for rate payers to also pay interest costs. It is appropriate to include interest because interest is part of the cost of the facilities in the same way that principal is.

The incremental costs of debt service are allocated to growth based on the portion of capacity that is related to expansion. In the case of the 1991 improvements (which refinanced the 1989 improvements), 74% (2.7 mgd added to 5.8 mgd for a total of 8.5 mgd) was related to growth. The 2003 (Phase I 2003/2004 improvements), 2004 (Phase II 2004/2005 improvements), and 2006 (Phase III 2006/2007 improvements) bonds were allocated based on the expansion related capacity (2.2 mgd added to 6.3 mgd of current flow for a total of 8.5 mgd[3]) of each of the unit processes included in each of the three phases of improvements. Attachment 1 is included to show the detailed allocations that were performed to derive the growth allocations in Table 1 for the 2003, 2004, and 2006 improvements. The result is an incremental cost of capacity of $5,115 per connection or SSU.

**Table 1. Incremental Cost Calculation**

| Facilities | Cost | Growth Allocation | Growth Related Cost | Growth Related Capacity (gal) | Growth Related Connections (SSUs) | Cost Per Connection |
|---|---|---|---|---|---|---|
| 1991 COP debt service | $28,065,964 | 74.0% | $20,768,813 | 2,700,000 | 13,918 | $1,492 |
| 2003 COP debt service | $7,666,354 | 26.0% | $1,989,711 | 2,200,000 | 11,340 | $175 |
| 2004 COP debt service | $37,376,493 | 24.2% | $9,046,845 | 2,200,000 | 11,340 | $798 |
| 2006 COP debt service | $50,261,973 | 58.4% | $29,364,137 | 2,200,000 | 11,340 | $2,589 |
| Subtotal | $123,370,784 | | $61,169,508 | | | $5,055 |
| Sanitary Sewer Master Plan | $115,970 | 100% | $115,970 | 2,200,000 | 11,340 | $10 |
| Public Works Admin. Building | $373,420 | 100% | $373,420 | 2,200,000 | 11,340 | $33 |
| Public Works - Storage Facilities | $187,870 | 100% | $187,870 | 2,200,000 | 11,340 | $17 |
| Total | $124,048,044 | | $61,846,768 | | | $5,115 |

**Table 2** shows the derivation of the unit cost of capacity for each loading category (i.e., flow, BOD and SS). The total cost allocated to growth ($61,846,768) is allocated to each

[3] The 2003 and 2004 bonds pay for facilities that do not add capacity beyond the current 6.8 mgd capacity. These facilities provide tertiary filtration and disinfection. With the 2006 bonds, the capacity will be expanded to 8.5 mgd.

loading category based on the functions associated with each improvement[4]. Each of these three cost categories is then divided by the respective units of capacity to derive the unit cost for each loading category.

**Table 2. Functionalized Costs**

| | | Allocations Per Loading Category | | | | | |
|---|---|---|---|---|---|---|---|
| | | Flow | | BOD | | SS | |
| | Total Cost | Percent | Amount | Percent | Amount | Percent | Amount |
| 1991 COP debt service | $20,768,813 | 40.0% | $8,307,525 | 30.0% | $6,230,644 | 30.0% | $ 6,230,644 |
| 2003 COP debt service | $1,989,711 | 10.4% | $206,096 | 44.8% | $891,808 | 44.8% | $ 891,808 |
| 2004 COP debt service | $9,046,845 | 57.2% | $5,171,640 | 21.4% | $1,937,603 | 21.4% | 1,937,603 |
| 2006 COP debt service | $29,364,137 | 58.8% | $17,277,779 | 34.1% | $9,999,355 | 7.1% | 2,087,003 |
| Subtotal | $61,169,508 | 50.6% | $30,963,041 | 31.2% | $19,059,409 | 18.2% | $11,147,057 |
| Sanitary Sewer Master Plan | $115,970 | 50.6% | $58,702 | 31.2% | $36,134 | 18.2% | $21,133 |
| Public Works Admin. Building | $373,420 | 50.6% | $189,019 | 31.2% | $116,352 | 18.2% | $68,049 |
| Public Works - Storage Facilities | $187,870 | 50.6% | $95,097 | 31.2% | $58,537 | 18.2% | $34,236 |
| Total | $61,846,768 | 50.6% | $31,305,859 | 31.2% | $19,270,432 | 18.2% | $11,270,476 |
| | | Units of Capacity and Cost of Capacity Per Loading Category | | | | | |
| Units for each loading category | | Gal/day: | 2,200,000 | mg/l: | 285 | mg/l: | 308 |
| | | Mg/day: | 2.200 | 1,000 lb/day: | 5.229 | 1,000 lb/day: | 5.644 |
| | | Mg/yr: | 803.0 | 1,000 lb/y: | 1,908.5 | 1,000 lb/y: | 2,087.2 |
| Unit cost per loading category | | Per mg/yr: | $38,986 | Per 1,000 lb/yr: | $10,097 | Per 1,000 lb/yr: | $5,400 |

To validate the methodology, the unit cost for each loading category are applied to the loadings specific to a residential connection in **Table 3**. The resulting capacity fee ($5,118 per residential connection) is virtually identical to the previous capacity fee ($5,115 per SSU).

**Table 3. Residential Capacity Fee**

| | Flow Component | | BOD Component | | SS Component | |
|---|---|---|---|---|---|---|
| Residential loadings | Gal/day: | 194 | mg/l: | 243 | mg/l: | 285 |
| | Mg/yr: | 0.0708 | 1,000 lb/y: | 0.1435 | 1,000 lb/y: | 0.1683 |
| Cost per loading category | | $ 2,761 | | $ 1,449 | | $ 909 |

| | |
|---|---|
| Flow component | $ 2,760.61 |
| BOD component | $ 1,448.97 |
| SS Component | $ 908.83 |
| | $ 5,118.41 |
| Fee per SSU | $ 5,114.61 |
| Rounding error | $ 3.80 |

**Table 4** summarizes the revised capacity fees and compares them with the existing capacity fees.

[4] See Attachment 1.

Table 4. Capacity Fee Summary and Comparison

| | | Capacity Fees | |
|---|---|---|---|
| | | Revised | Existing |
| **Residential Connections** | | | |
| Bedrooms | SSUs | | |
| 1 | 0.75 | $ 3,837 | $ 1,575 |
| 2 | 1.00 | $ 5,115 | $ 2,099 |
| 3 | 1.25 | $ 6,400 | $ 2,627 |
| 4 | 1.50 | $ 7,678 | $ 3,151 |
| 5 | 1.75 | $ 8,955 | $ 3,675 |
| 6 | 2.00 | $ 10,233 | $ 4,200 |
| 7 | 2.25 | $ 11,515 | $ 4,726 |
| **Commercial/Moderate Strength Conections** | | | |
| Per SSU | | $ 5,115 | $ 2,099 |
| **High-Strength Connections** | | | |
| Per MG per year | | $ 38,986 | $ 11,193 |
| Per 1,000 lbs BOD per year | | $ 10,097 | $ 4,611 |
| Per 1,000 lbs SS per year | | $ 5,400 | $ 2,076 |

The revised capacity fees are greater than the existing capacity fees because of the improvements financed by the 2003, 2004, and 2006 bonds, which total more that twice the improvements included in the existing capacity fees. In addition, cost per million gallons of flow has increased proportionately more than the charges per 1,000 pounds of BOD and SS because of the flow-related function provided by the improvements. Despite this increase, the revised capacity fees are less than the unit cost of capacity for a new plant.[5]

## CONCLUSION

We recommend that the City adopt the revised capacity fees described in this report. In addition, we recommend that the City periodically update the capacity fees to reflect revised cost estimates and actual costs incurred. Between periodic updates, we

[5] West Yost & Associates estimated the cost of a new 8.5 mgd plant to be about $125 million, which with interest costs of financing could cost about $245 million, yielding a unit cost of $5,610 per SSU.

recommend that the City annually escalate the capacity fees using the ENR construction cost index so that the value of the capacity fees does not decline because of inflation. Rate payers are entitled to receive reimbursement based on the current cost of capacity and should not see their investment eroded by inflation.

Very truly yours,

HILTON FARNKOPF & HOBSON, LLC

John W. Farnkopf, P.E.
Senior Vice President

Attachment 1 as noted.

Phase I 2003 Improvements

**Blower Improvements**

| Item | Estimated Construction Cost | Users Served Existing | Users Served New | Flow | BOD | SS | Allocation to Functional Categories Flow | BOD | SS | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Mobilization and contractor indirect costs @ 12% | $245,000 | | | | | | | | | |
| Demolition | $10,000 | | | | | | | | | |
| Blowers (pre-purchased) | $300,000 | | | | | | | | | |
| Blower accessories (cost agreed to in pre-purchase contract) | $150,000 | | | | | | | | | |
| Blower installation | $99,000 | | | | | | | | | |
| Blower building piping, valves, fittings and appurtenances | $186,000 | | | | | | | | | |
| Startup, testing, training | $19,000 | | | | | | | | | |
| Electrical service upgrade [a] | $150,000 | | | | | | | | | |
| Electrical, instrumentation, and controls | $1,000,000 | | | | | | | | | |
| Subtotal (rounded) | $2,160,000 | | | | | | | | | |
| Estimating Contingency @ 20% | $430,000 | | | | | | | | | |
| Subtotal | $2,590,000 | | | | | | | | | |
| Engineering and Administration @ 25% | $650,000 | | | | | | | | | |
| Construction Contingency @ 10% | $130,000 | | | | | | | | | |
| Estimated Construction Cost | $3,370,000 | $2,500,000 | $870,000 | 0% | 50% | 50% | $ - | $ 1,685,000 | $ 1,685,000 | $ 3,370,000 |

[a] PG&E utility costs not included.

**New NCPA Pumping Station & Diversion Structure**

| Item | Estimated Construction Cost | Users Served Existing | Users Served New | Flow | BOD | SS | Allocation to Functional Categories Flow | BOD | SS | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Mobilization and contractor indirect costs @ 12% | $30,000 | | | | | | | | | |
| Excavation | $3,000 | | | | | | | | | |
| Sheeting & Shoring | $10,000 | | | | | | | | | |
| Concrete Structure | $32,000 | | | | | | | | | |
| 30" FE Pipe | $15,000 | | | | | | | | | |
| Pumps | $30,000 | | | | | | | | | |
| Valves and Appurtenances | $10,000 | | | | | | | | | |
| Startup, testing, training | $4,000 | | | | | | | | | |
| Electrical, instrumentation, and controls | $65,000 | | | | | | | | | |
| Subtotal (rounded) | $200,000 | | | | | | | | | |
| Estimating Contingency @ 20% | $40,000 | | | | | | | | | |
| Subtotal | $240,000 | | | | | | | | | |
| Engineering and Administration @ 25% | $60,000 | | | | | | | | | |
| Construction Contingency @ 10% | $12,000 | | | | | | | | | |
| Estimated Construction Cost | $312,000 | $230,000 | $82,000 | 100% | 0% | 0% | $ 312,000 | $ - | $ - | $ 312,000 |

**Civil Improvements (Levee Construction)**

| Item | Estimated Construction Cost | Users Served Existing | Users Served New | Flow | BOD | SS | Allocation to Functional Categories Flow | BOD | SS | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Mobilization and contractor indirect costs @ 12% | $30,000 | | | | | | | | | |
| Excavation & Loading (5,000 CY @ $10/CY) | $50,000 | | | | | | | | | |
| Hauling (5,000 CY @ $3.50/CY) | $25,000 | | | | | | | | | |
| Engineered Fill (5,000 CY @ $1.50/CY) | $7,500 | | | | | | | | | |
| Paving | $20,000 | | | | | | | | | |
| Piping | $60,000 | | | | | | | | | |
| Subtotal (rounded) | $190,000 | | | | | | | | | |
| Estimating Contingency @ 20% | $40,000 | | | | | | | | | |
| Subtotal | $230,000 | | | | | | | | | |
| Engineering and Administration @ 25% | $60,000 | | | | | | | | | |
| Construction Contingency @ 10% | $12,000 | | | | | | | | | |
| Estimated Construction Cost | $302,000 | $220,000 | $82,000 | 33% | 33% | 33% | $ 100,667 | $ 100,667 | $ 100,667 | $ 302,000 |
| | $ 3,984,000 | $ 2,950,000 | $ 1,034,000 | | | | $ 412,667 | $ 1,785,667 | $ 1,785,667 | $ 3,984,000 |
| | | | | | | | 10.4% | 44.8% | 44.8% | To Table 11 |

| | | |
|---|---|---|
| Estimated Total 2003 Construction Cost | $3,984,000 | |
| Estimated 2003 Construction Cost Serving Existing Users | $2,950,000 | |
| Estimated 2003 Construction Cost Serving New Users | $1,034,000 | |
| % Estimated 2003 Construction Cost Serving Existing Users | **74.0%** | To Table 11 |
| % Estimated 2003 Construction Cost Serving New Users | **26.0%** | To Table 12 |

**Phase II 2004 Improvements**

**Installation of Parkson Panels in 2 Basins**

| Item | Estimated Construction Cost | Users Served Existing | Users Served New | Allocation to Functional Categories Flow | BOD | SS | Flow | BOD | SS |
|---|---|---|---|---|---|---|---|---|---|
| Mobilization @ 5% | $55,000 | | | | | | | | |
| Contractor indirect costs @ 12% | $130,000 | | | | | | | | |
| Demolition of existing diffusers/piping | $5,000 | | | | | | | | |
| Purchase aeration panels & appurtenances | $270,000 | | | | | | | | |
| Aeration piping and panel installation | $350,000 | | | | | | | | |
| Baffle wall and mixers | $85,000 | | | | | | | | |
| Startup, testing, training | $5,000 | | | | | | | | |
| Subtotal (rounded) | $900,000 | | | | | | | | |
| Estimating Contingency @ 20% | $180,000 | | | | | | | | |
| Subtotal | $1,080,000 | | | | | | | | |
| Engineering and Administration @ 25% | $270,000 | | | | | | | | |
| Construction Contingency @ 10% | $54,000 | | | | | | | | |
| Estimated Construction Cost | $1,404,000 | $1,404,000 | | 0% | 50% | 50% | $0 | $702,000 | $702,000 |

| Item | Estimated Construction Cost | Users Served Existing | Users Served New | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Tertiary Filtration Improvements (Estimate from Master Plan) | $11,910,000 | $8,830,000 | $3,080,000 | 33% | 33% | 33% | $3,970,000 | $3,970,000 | $3,970,000 |
| UV Disinfection Facilities (Based on Estimate from Wedeco) | $8,500,000 | $6,300,000 | $2,200,000 | 100% | | | $8,500,000 | $0 | $0 |
| | $21,814,000 | $16,534,000 | $5,280,000 | | | | $12,470,000 | $4,672,000 | $4,672,000 |
| | | | | | | | 57.2% | 21.4% | 21.4% |

| | | | |
|---|---|---|---|
| Estimated Total 2004 Construction Cost | $21,814,000 | | |
| Estimated 2004 Construction Cost Serving Existing Users | $16,534,000 | $0 | 0 |
| Estimated 2004 Construction Cost Serving New Users | $5,280,000 | | |
| % Estimated 2004 Construction Cost Serving Existing Users | 75.8% | To Table 11 | |
| % Estimated 2004 Construction Cost Serving New Users | 24.2% | To Table 11 | |

Phase III 2006 Improvements

| Item | Estimated Construction Cost | Users Served Existing | Users Served New | Flow | BOD | SS | Allocation to Functional Categories Flow | BOD | SS | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Influent Screening | $650,000 | $480,000 | $170,000 | 50% | | 50% | $ 325,000 | $ - | $ 325,000 | $ 650,000 |
| Headworks Improvements | $260,000 | $190,000 | $70,000 | 100% | | | $ 260,000 | $ - | $ - | $ 260,000 |
| Modify Domestic Pumps | $210,000 | $160,000 | $50,000 | 100% | | | $ 210,000 | $ - | $ - | $ 210,000 |
| Industrial Pumping Improvements | $360,000 | $360,000 | | 100% | | | $ 360,000 | $ - | $ - | $ 360,000 |
| 2 New Aeration Basins | $4,440,000 | | $4,440,000 | 50% | 50% | | $ 2,220,000 | $ 2,220,000 | $ - | $ 4,440,000 |
| New Diffusers in Existing Aeration Basins | $1,080,000 | $1,080,000 | | 50% | 50% | | $ 540,000 | $ 540,000 | $ - | $ 1,080,000 |
| New Secondary Clarifier | $2,700,000 | | $2,700,000 | 50% | 50% | | $ 1,350,000 | $ 1,350,000 | $ - | $ 2,700,000 |
| RAS/WAS Improvements | $1,360,000 | $1,090,000 | $270,000 | 50% | 50% | | $ 680,000 | $ 680,000 | $ - | $ 1,360,000 |
| New Anaerobic Digester | $1,710,000 | | $1,710,000 | | 50% | 50% | $ - | $ 855,000 | $ 855,000 | $ 1,710,000 |
| Sludge Lagoon Improvements | $930,000 | $690,000 | $240,000 | 50% | 50% | | $ 465,000 | $ 465,000 | $ - | $ 930,000 |
| Storage Pond Aeration | $250,000 | $190,000 | $60,000 | 50% | 50% | | $ 125,000 | $ 125,000 | $ - | $ 250,000 |
| Control System & Miscellaneous Operational Upgrades | $460,000 | $340,000 | $120,000 | 33% | 33% | 33% | $ 153,333 | $ 153,333 | $ 153,333 | $ 460,000 |
| Operation Building Improvements | $150,000 | $110,000 | $40,000 | 100% | | | $ 150,000 | $ - | $ - | $ 150,000 |
| 100 Ac Wetlands | $3,000,000 | $2,220,000 | $780,000 | 100% | 0% | 0% | $ 3,000,000 | $ - | $ - | $ 3,000,000 |
| Reaeration, Diffuser | $1,200,000 | $890,000 | $310,000 | 100% | 0% | | $ 1,200,000 | $ - | $ - | $ 1,200,000 |
| Subtotal | $18,760,000 | $7,800,000 | $10,960,000 | | | | $ 11,038,333 | $ 6,388,333 | $ 1,333,333 | $ 18,760,000 |
| | | | | | | | 59% | 34% | 7% | 100% |
| Contingencies @ 20% | $3,752,000 | $1,560,000 | $2,192,000 | | | | $ 1,289,767 | $ 746,441 | $ 155,792 | $ 2,192,000 |
| | $22,512,000 | $9,360,000 | $13,152,000 | | | | $ 12,328,100 | $ 7,134,774 | $ 1,489,126 | $ 20,952,000 |
| | | | | | | | 59% | 34% | 7% | To Table 11 |

| | |
|---|---|
| Estimated Total 2005-6 Construction Cost | $22,512,000 |
| Est.2005-6 Construction Cost Serving Existing Users | $9,360,000 |
| Est. 2005-6 Construction Cost Serving New Users | $13,152,000 |
| % Est.2005-6 Construction Cost Serving Exist. Users | **41.6%** |
| % Est.2005-6 Construction Cost Serving New Users | **58.4%** |

## 13.12.020 Definitions.

5. “Capacity” or “Impact fee” means a charge as described in this chapter, levied on construction, or on new, expanded or ongoing activity, which uses POTW capacity and other wastewater facilities associated with growth. The fee is normally paid at the time of issuance of a building permit.

45. “Sewage service unit or SSU” is defined as each increment of flow equal to the flow from an average two-bedroom residence (~~two hundred and six~~ one-hundred and ninety-four gallons per day) and having a strength less than three hundred milligrams per liter BOD and SS.

## 13.12.180 Domestic system service charges.

A. Basis. Charges for use of the domestic system shall be determined by the volume, biochemical oxygen demand (BOD) and suspended solids (SS) of wastes discharged. In addition, charges for preparation and maintaining the Sewer Master Plan, expansion of the Public Works Administration Building and expansion of the Public Works Storage Facilities are allocated based upon volume, BOD and SS.

## 13.12.190 Domestic system capacity **or impact** fees.

The capacity fee shall cover the capital cost associated with the POTW capacity ~~which will be utilized by the discharger~~ and the planning, financing, acquisition and development of other services and facilities directly related to the utilization of capacity by the discharger. Any actual costs incurred by the city in making the physical connection (tap) shall be separate and in addition to the capacity fee described in this section.

D. The capacity fee shall be paid at the time a building permit is issued and cannot be prepaid.

## 15.64.010 Findings and purpose.

F. The specific improvements and costs for wastewater capacity impact fees are described in the City of Lodi Wastewater Capacity Fees Analysis prepared for the City by Hilton, Farnkopf & Hobson, LLC, dated August 15, 2005, and the Development Impact Fee Update Study prepared for the City by Harris & Associates, dated October 2001, copies of which are on file with the City Clerk. The calculation of the fee is presented in Title 13, Chapter 13.12 of the Lodi Municipal Code.

G. New development will generate new demand for facilities which must be accommodated by construction of new or expanded facilities. The amount of demand generated and, therefore, the benefit gained, varies according to kind of use. Therefore, a "residential acre equivalent" (RAE) factor was developed to convert the service demand for general plan based land use categories into a ratio of the particular use's rate to the rate associated with a low-density, single-family dwelling gross acre. The council finds that the fee per unit of development is directly proportional to the RAE associated with each particular use.

H. The city has previously approved various development projects which have made significant financial expenditures towards completion, including the payment of the then current development impact mitigation fees; but have not obtained a building permit. The city council finds and declares that such projects should be allowed to proceed without the imposition of new development impact mitigation fees imposed under this chapter. (Ord. 1547 § 1, 1992; 1526 § 1, 1991; Ord. 1518 § 1 (part), 1991)

## 15.64.030 Development impact funds.

A. The city finance director shall create in the city treasury the following special interest-bearing trust funds into which all amounts collected under this chapter shall be deposited:

1. Water facilities;

2. Sewer facilities:

~~a. General sewer facilities,~~

~~b. Kettleman Lane lift station,~~

~~c. Harney Lane lift station,~~

~~d. Cluff Avenue lift station,~~

3. Storm drainage facilities;

4. Street improvements;

5. Police facilities;

6. Fire facilities;

7. Parks and recreation facilities;

8. General city facilities and program administration.

## 15.64.060 Calculation of fees.

C. Sewer fees shall be calculated and collected per LMC 13.12.

## 15.64.070 Residential acre equivalent factor.

B. The residential acre equivalent (RAE) factors are as set out in the following table.

| Land Use Categories | Water RAE | ~~Sewer RAE~~ | Storm Drainage RAE | Streets RAE | Police RAE | Fire RAE | Parks & Recreation RAE | General Facilities RAE |
|---|---|---|---|---|---|---|---|---|
| **RESIDENTIAL** | | | | | | | | |
| Low Density | 1.00 | ~~1.00~~ | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Medium Density | 1.96 | ~~1.96~~ | 1.00 | 1.96 | 1.77 | 1.96 | 1.43 | 1.43 |
| High Density | 3.49 | ~~3.49~~ | 1.00 | 3.05 | 4.72 | 4.32 | 2.80 | 2.80 |
| East Side Residential | 1.00 | ~~1.00~~ | 1.00 | 1.00 | 1.09 | 1.10 | 1.10 | 1.10 |
| **PLANNED RESIDENTIAL** | | | | | | | | |
| Low Density | 1.00 | ~~1.00~~ | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Medium Density | 1.96 | ~~1.96~~ | 1.00 | 1.96 | 1.77 | 1.96 | 1.43 | 1.43 |
| High Density | 3.49 | ~~3.49~~ | 1.00 | 3.05 | 4.72 | 4.32 | 2.80 | 2.80 |
| **COMMERCIAL** | | | | | | | | |
| Retail Commercial | 0.64 | ~~0.94~~ | 1.33 | 2.08 | 4.12 | 2.69 | 0.32 | 0.89 |
| Office Commercial | 0.64 | ~~0.94~~ | 1.33 | 3.27 | 3.72 | 2.46 | 0.54 | 1.53 |
| **INDUSTRIAL** | | | | | | | | |
| Light Industrial | 0.26 | ~~0.42~~ | 1.33 | 2.00 | 0.30 | 0.64 | 0.23 | 0.64 |
| Heavy Industrial | 0.26 | ~~0.42~~ | 1.33 | 1.27 | 0.19 | 0.61 | 0.33 | 0.93 |

(Ord. 1547 § 3, 1992; Ord. 1518 § 1 (part), 1991)